

WHAT IS CLAIMED IS:

1. A method of decoding input, the method comprising:

identifying possible sequences of words from the input;

using a class-based language model and a class entity dictionary to select one of the possible sequences of words as an output sequence;

receiving modifications made to the output sequence; and

using the modifications to change the class entity dictionary.

2. The method of claim 1 wherein using the modifications to change the class entity dictionary comprises using the modifications to add an entity to the class entity dictionary.

3. The method of claim 2 wherein adding an entity to the class entity dictionary comprises adding an entity to a class in the class entity dictionary.

4. The method of claim 3 wherein adding an entity further comprises estimating a probability for the added entity given the class to which the entity is added.

5. The method of claim 4 wherein receiving a modification comprises receiving a modified entity that represents a modification of a decoded entity in the output sequence and wherein adding an entity comprises adding the modified entity.
6. The method of claim 5 wherein estimating a probability for the entity comprises estimating a probability based in part on a probability associated with the decoded entity.
7. The method of claim 6 wherein estimating a probability for the entity comprises estimating the probability based on an n-gram probability associated with the decoded entity and an n-gram probability associated with the class to which the modified entity is added.
8. The method of claim 1 wherein using the modifications to change the class entity dictionary comprises increasing a probability associated with an entity in the class entity dictionary.
9. The method of claim 8 wherein receiving modifications comprises receiving a modified entity that represents a modification of a decoded entity in the output sequence and wherein the modified entity is found in the class entity dictionary.

10. The method of claim 1 wherein using the modifications to change the class entity dictionary comprises decreasing a probability associated with an entity in the class entity dictionary.

11. The method of claim 10 wherein receiving modifications comprises receiving a modified entity that represents a modification of a decoded entity in the output sequence and wherein the modified entity is not found in the class entity dictionary but the decoded entity is found in the class entity dictionary.

12. The method of claim 11 wherein decreasing the probability of an entity comprises decreasing the probability of the decoded entity.

13. A computer-readable medium having computer-executable instructions for performing steps comprising:

generating a sequence of words based in part on a class entity dictionary that provides probabilities for entities in at least one class; receiving a modification to the sequence of words such that a decoded entity in the sequence of words is modified into a modified entity; and setting a probability of an entity in the class entity dictionary based at least

in part on at least one of the decoded entity and the modified entity.

14. The computer-readable medium of claim 13 wherein setting a probability of an entity in the class entity dictionary comprises adding the modified entity to the class entity dictionary and selecting a probability for the modified entity.

15. The computer-readable medium of claim 14 wherein selecting a probability for the modified entity comprises estimating the probability based on a probability associated with the decoded entity.

16. The computer-readable medium of claim 15 wherein estimating the probability further comprises estimating the probability based on a probability associated with a class in the class entity dictionary.

17. The computer-readable medium of claim 16 wherein estimating the probability comprises estimating the probability based on an n-gram probability associated with the decoded entity and an n-gram probability associated with the class.

18. The computer-readable medium of claim 13 wherein setting a probability of an entity comprises increasing the probability of an entity.

19. The computer-readable medium of claim 18 wherein setting a probability further comprises:

determining that the modified entity is in the class entity dictionary; and increasing the probability of the modified entity.

20. The computer-readable medium of claim 13 wherein setting the probability of an entity comprises decreasing the probability of an entity.

21. The computer-readable medium of claim 20 wherein setting a probability further comprises:

determining that the decoded entity is in the class entity dictionary; and decreasing the probability of the decoded entity.

22. A method of adapting a class entity dictionary used with a class-based language model, the method comprising:

receiving a user modification of a sequence of words that were identified based in part on the class-based language model;

identifying a decoded segment that has been modified to become a modified segment in the user modification; and

determining a probability for the modified segment based in part on the decoded segment.